GPS/GSM/GPRS TRACKER

MANUAL V1.4

Model NO: GMT-2000

Preface

Thank you for purchasing the GMT-2000. This deliberately edited manual is to introduce the GMT-2000 with the complete technical data and the instructions showing how to operate the device smoothly and correctly. Make sure to read this manual carefully before using this product. Most problems could be solved through the explanations and the troubleshooting tips. Once you finish reading it, keep it handy for necessary reference.

Please note that specification and information are subject to changes without prior notice in this manual. Any change will be integrated in the latest release. The manufacturer assumes no responsibility for any errors or omissions in this document.

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1. Summary

Working Based on existing GSM/GPRS network and GPS satellites, this product can locate and monitor any remote targets by SMS or Internet.

2. Applications

Track exactly where people and or vehicles go. Can be used for preventing theft of vehicles, the protection of kids, older persons and especially pets, the protection of personal belongings, tracks secretly:

1.1 Tracking for vehicle-renting/outdoor machines
1.2 The monitoring of kids, older persons, disabled, and pets
1.3 Protection for the businessmen
1.4 Management for the staff outside
1.5 Tracking criminals

3. Features

1.1 Build in GPS personal locator
1.2 GSM/SMS communication or GPRS TCP/TUP connection
1.3 Works worldwide
1.4 High sensitivity, new technology and latest ST chipset
- Excellent for fixing the position even at a weak signal status.
- Work well even in areas with limited sky view like urban canyons.

1.5 Compact size,and smaller than one nae card. Easy to hide
1.6 Very Low power cinsumption
1.7 Fast Signal Acquisition
1.8 Support single location and continuous tracking
1.9 Support location triggered bu tracker
1.10 Support location triggered by authorized cell phone
1.11 Support alarm and remote monitor
1.12 Support quick dialing buttons for 3 preset phone numbers
1.13 Support check location by SMS and Internet
1.14 Monitors can track the person without interfering him
- Live !Read-Time Tracking!

1.15 Locate the locator holder by the mobile phone via SMS(short messaging system)
1.16 SOS button send out exact location for immediate resue/action.
1.17 Geo-fencing to restrict movement to a defined radius.

4. Safety & Caution

Please comply with the instructions to extend the unit life:

1. As this unit has the ability to track, users should make use of this unit in legal right. Users have to take all the responsibilities if invading others' rights by illegally using this unit, for example: invading others' secrets on purpose.
2. Read these simple guidelines. Not following them may be dangerous or illegal. Read the full user manual for more information.
3. This unit gets relative position information through Global Positioning System (GPS). By the limitation of GPS transmission, it is normal if the position information is drifted and unstable.
4. This unit transmits signals through GSM and GPRS system. Please confirm your SIM card is activated with Data Service before use.
5. Before using this unit, please follow "Quick Start Guide" to configure the setup. Then the unit is ready to start working.
6. Handle carefully. Don't vibrate or shake it violently.
7. Keep the unit dry. Any liquid, i.e. rain, moisture, may destroy or damage the inside circuitry
8. Clear the unit with a piece of dry cloth. Don't clean in chemicals, detergent.
9. Don't paint the unit, this may cause some foreign materials left in between the parts.
10. Don't dismount the antenna randomly, or use other antennas. This may interfere the transmission, and increase the radiation as well.
11. After switch on, you can set anytime to transmit position information to service platform for search.
12. Please handle this unit carefully. Avoid any crash, shaking or throwing, resulting from damage or impairment on any part of this unit.
13. Water Resistance- Your unit and accessories(Including battery and charger) is not water resistant . Keep it dry. Use waterproof bag if necessary.
14. Please use the battery and charger provided by manufacturer. Using other batteries and chargers will inactivate all of the warranty. Our company is not responsible for damages caused by the usage of any unauthorized accessories.
15. Do not put any metal materials, such as keys in your pocket, close to the battery. It may cause the shortage of the battery.
16. For it's Li-ion battery, which contains harmful chemicals and may burst, please don't bump, puncture it violently and keep it off fire.
17. Please follow the laws and protocols to recycle or discard the battery properly.
18. Do not put any uncovered fire, such as lightened candles, on top of this unit.
19. Don't put the unit in overheated or overcooled places. It may cause malfunction of this unit.
20. Don't use & store the unit in dusty places.
21. Do not put this unit in microwave or any other high pressure appliances. It may result in the damage of parts of this unit.
22. This unit belongs to high frequent equipment. It may explode or damage in the environment with flammable liquids.
23. Don't disassemble or refit the unit.
24. Services should be requested if damage happens to this unit. For examples, any liquid or dust contaminating this unit, exposure to rain or extreme humid environment, working abnormality

or falling from height. Please contact the assigned associates to help.

Contact number: 886- 6- 2027499

【Warning】 The warranty is expired once the security label is damaged.

【Warning】 Please read this manual carefully and follow all the instructions or the warranty will be expired. Any modification on this unit will inactivate the warranty.

【Warning】 This unit requires stable receptions from GPS and GSM systems. It may result in positioning difficulty if reception signal is too low.

5. Specification

GSM Modules	Embedded GSM 900/1800mHz or 850/1900 mHz Support Class 10 GPRS TCP/UDP
GPS Module	Embedded ST GPS Received Module
Antenna	Embedded GPS and GSM Antenna
GSM Standby Time	100 hours (without GPS)
Standby Time	100 hours (with GPS)
Battery	Li-Ion battery 3.7V 1300mA/hr
Travel charger	Input : 100~240V
	Output: 5V, 800mA
Operating Temperature	-20°C to + 80°C
Storage Temperature	-30°C to + 85°C
LED	3 LEDs showing Power ,GPS and GSM status, And other operation status.
Modulation Method	GPRS : GMSK
Memory capacity	NorFlash + SDRAM 64 bit + 16M bit
Speech Coding method	HR/FR/EFR/AMR
Size：76 * 46 * 25 mm	

6. Get Started

6.1 Accessories

GMT2000 Tracker Body
Battery
USB Charged Cable
Travel Charger or Car Charger

User Manual (GMT2000 Tracker「User Manual」 and 「Quick Start Guide」

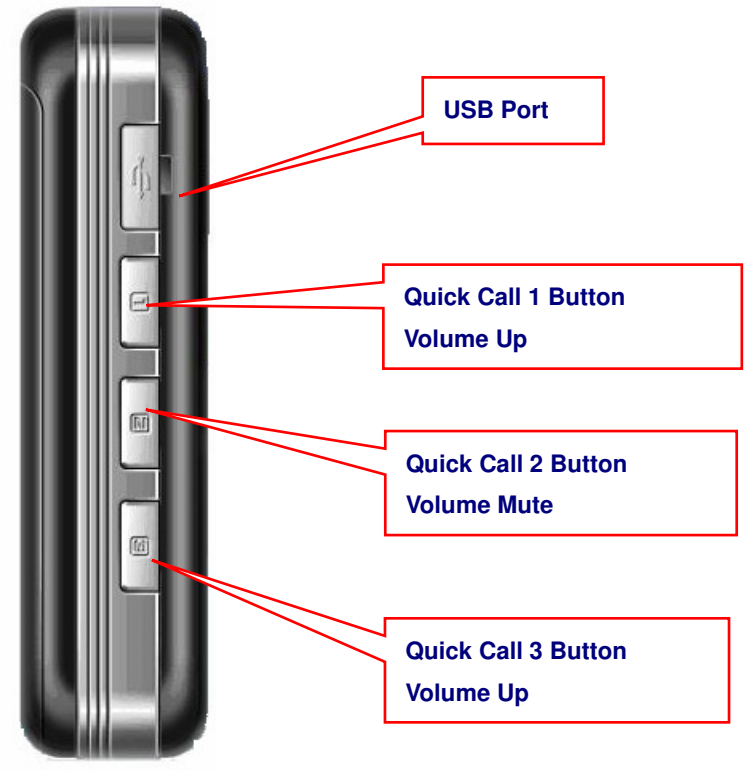
GMT2000 Tracker Control Unit

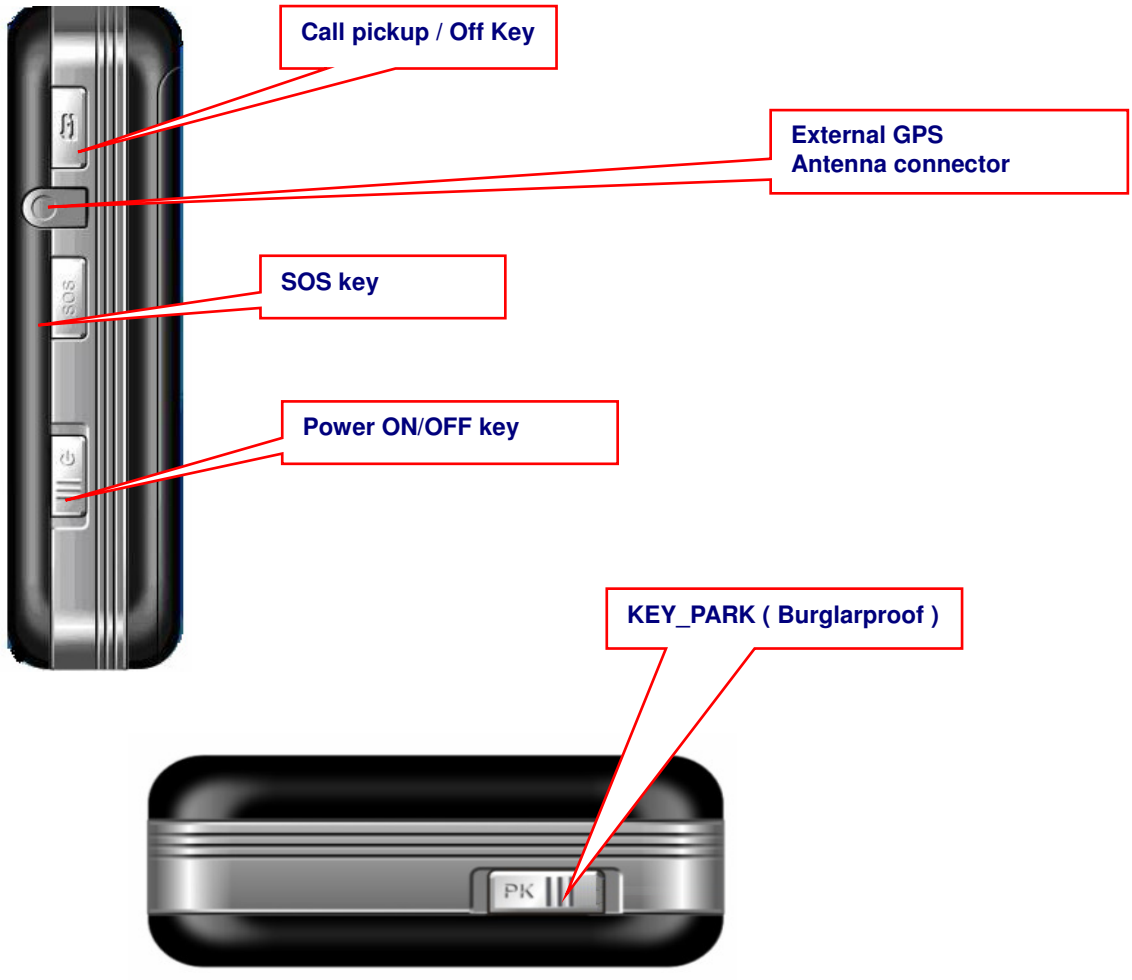
Battery

Travel Charger

Car Charger

6.2Hardware Description





Button Fuction Description

Button	Meaning
Power Button	Turn On/Turn Off
SOS Button	You can assign a phone numbers to the SOS button. When this button is press, GMT-2000 will send it's location information to the Guardian, Security Operation Center and 3 preset SOS phone number by SMS, at the same time, GMT-2000 will dial to the preset phone number- Guardian.
Call 1 Button	You can assign a phone numbers to the Quick call 1 button. When this button is press, GMT-2000 will dial to the preset phone number
Call 2 Button	You can assign a phone numbers to the Quick call 2 button. When this button is press, GMT-2000 will dial to the preset phone number
Call 3 Button	You can assign a phone numbers to the Quick call 3 button. When this button is press, GMT-2000 will dial to the preset phone number
Key_Park	Press when you park your car. When Park function is activated, GMT-2000 will into to the mode of guard against burglar within one minute.

7. Operation

7.1 Insert TF Card

Insert TF Card to GMT-2000 as following picture shows:

7.2 Insert SIM Card

Insert SIM Card as following picture shows:

7.3 Battery Installation

1. Before you can use the GMT-2000, you must Fully charge the battery by Travel Charger or Car Charger at least 8-12 hour.
2. If you would like to change the battery, you may open the battery case by sliding the plastic cover.
3. After removing the cover, install the battery as following picture shows:
4. Gently put back the plastic cover by following the track.

7.4 Charge Battery

1. Plug the charging adaptor into the GMT-2000's charging socket.
2. Plug the adaptor into the electrical outlet.
3. Charge GMT-2000 until the red LED turns to LED offer on tracker

Charge Battery by Travel charger

【Warning】 Do charge the battery to capacity in 8 -12 hours for first use. Please use the battery and charger provided by the manufacturer. This unit adopts built-in Li-ion battery, and full battery will support around 48 hours use on end. After first use, the battery can be charged fully in 3-5hours for second use.

【Warning】 The product will keep sending the position information to the service platform after user turns on. Therefore, please turn off the product when you charge.

【Warning】 User should charge the battery at the room temperature. Battery will not be probably charged if the temperature is lower than centigrade 0 degree (Fahrenheit 32 degree) or higher than centigrade 45 degree (Fahrenheit 113 degree).

7.5 Turn On

When the device is off, press the power button to on side. It will enter standby mode- GMT-2000's Power (Yellow), GPS (Blue) and GSM (Red) LED's will light, and GMT-2000 will then start searching the GSM station and getting the GPS fix. It is suggested that you be an outer place where it can receive the better GPS signal when you turn on the device.

【Please refer the 4.7 LED Functionality】

7.6 Turn off

When the device is on, press the button to off side. When the LEDS - Power (yellow), GPS and GSM (Red) go out, it indicates that the device is turn off for sure.

7.7 LED Functionality – Power On

Yellow LED – indicating power status.
Off : Power is off or charging is complete
Flashing: Low power or charging

Red LED – indicating GSM status.
Off : GSM service is available
Light still and have a short blinking every 8 seconds: Can't receive the GSM signal.
Flashing (2 Second) : Received the message from the service center

Blue LED – indicating GPS status.
Light still and have a short blinking every 4 seconds: GMT-2000 is getting the GPS fix
Light still and have a short blinking every 8 seconds: GMT-2000 is continued getting the GPS fix successful.

7.8 SOS Button

User can press the "SOS" urgent key for 2 seconds when users have emergency. The product will send the help message to the handset of defaulted urgent contactor or keep tracing the position of the product through the website of service platform. (Please refer to the manual of service platform for setup.)

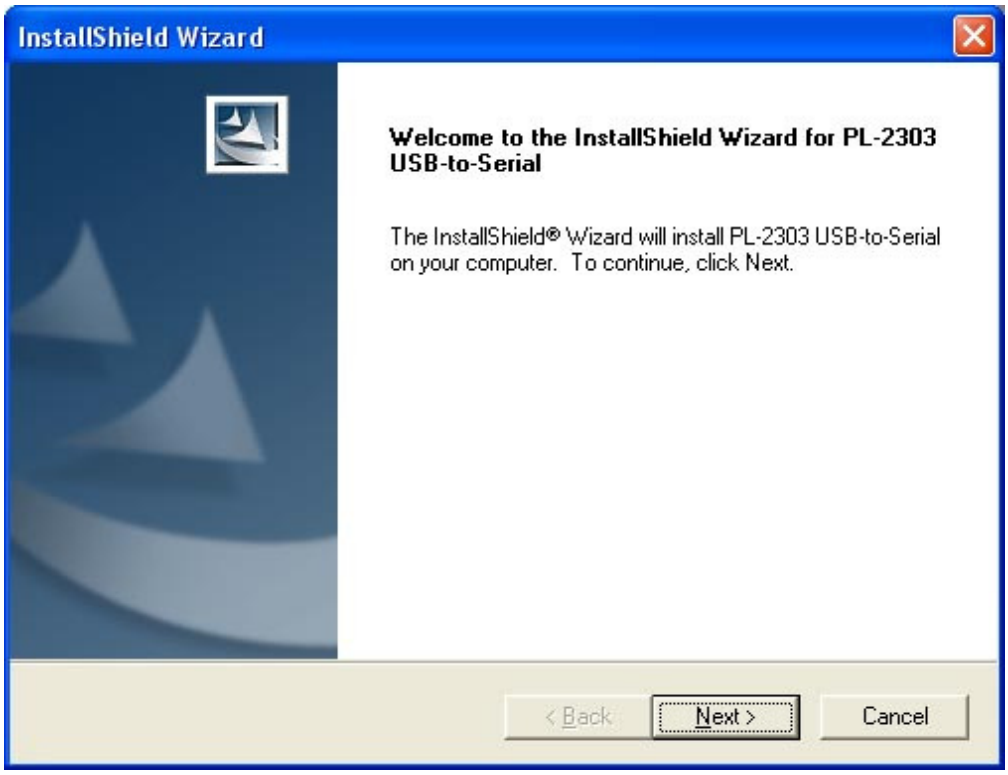
7.9 Park Button

When "Park" button is switch ON, within one minute will activate the monitoring stage, if the vibration last more than fifteen seconds, a signal will be sent to the guardant and monitoring center. When "Park" button is switch OFF, the monitoring function will be released and back to normal function. (For more detail, please refer to the service platform manual)

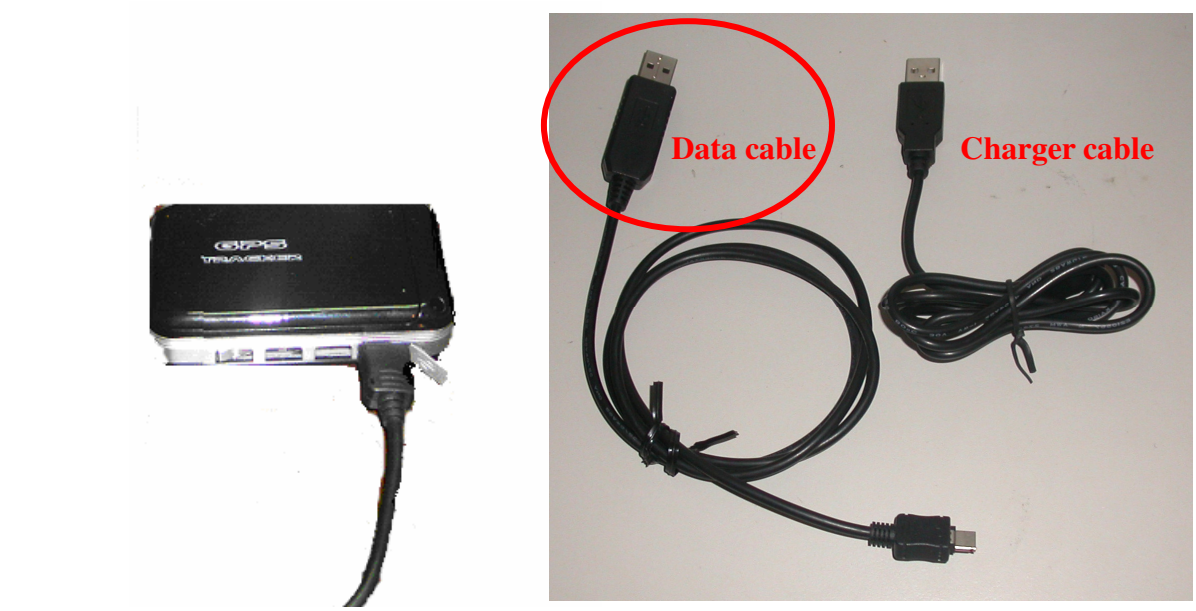
8. Use Configure Software Preset Device

1. Install the battery in device which you need to change the parameter and start the device

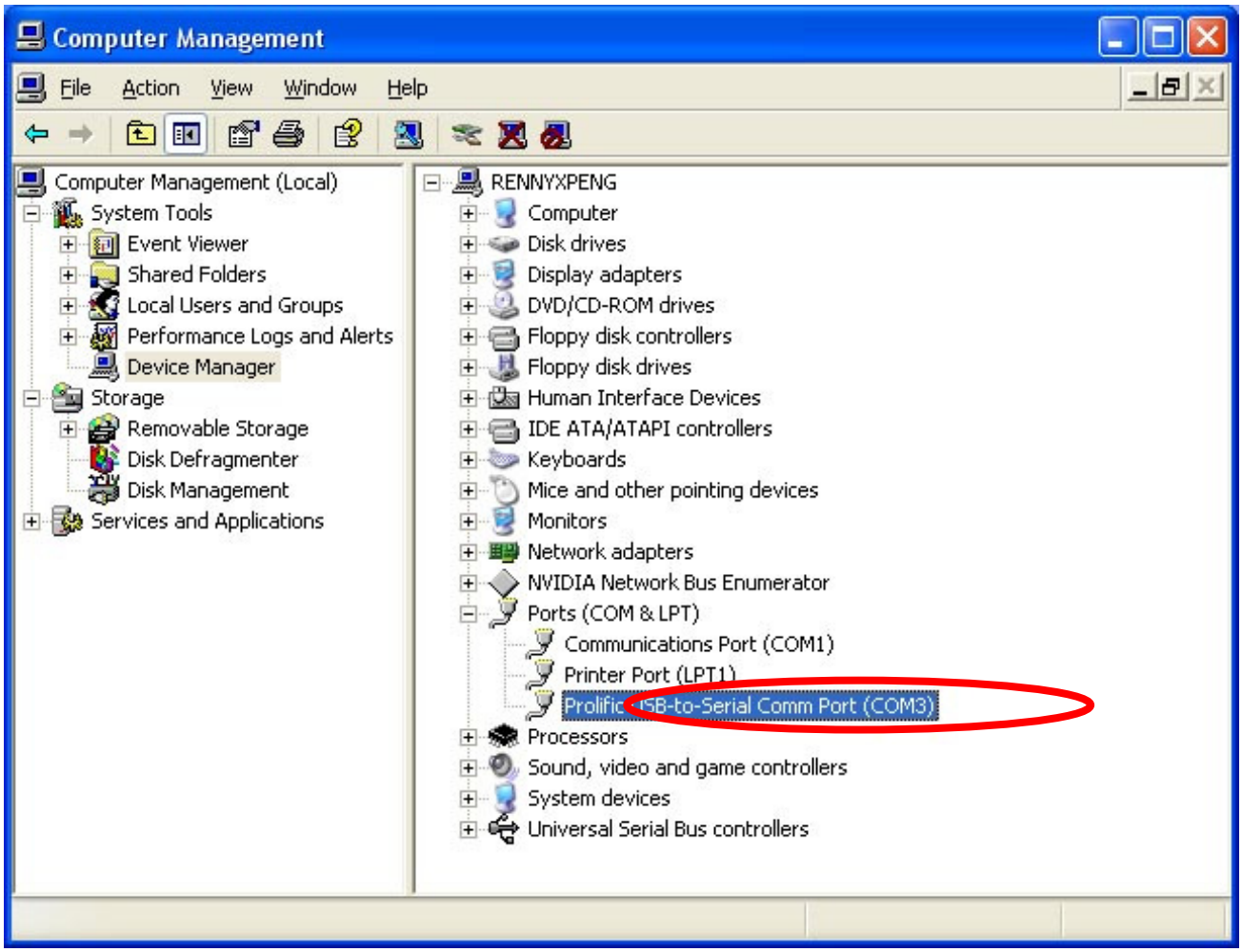
2. Install driver for the configure cable from CD
   (Only Windows XP need install this driver)


InstallShield Wizard
Welcome to the InstallShield Wizard for PL-2303 USB-to-Serial
The InstallShield® Wizard will install PL-2303 USB-to-Serial on your computer. To continue, click Next.
< Back
Next >
Cancel

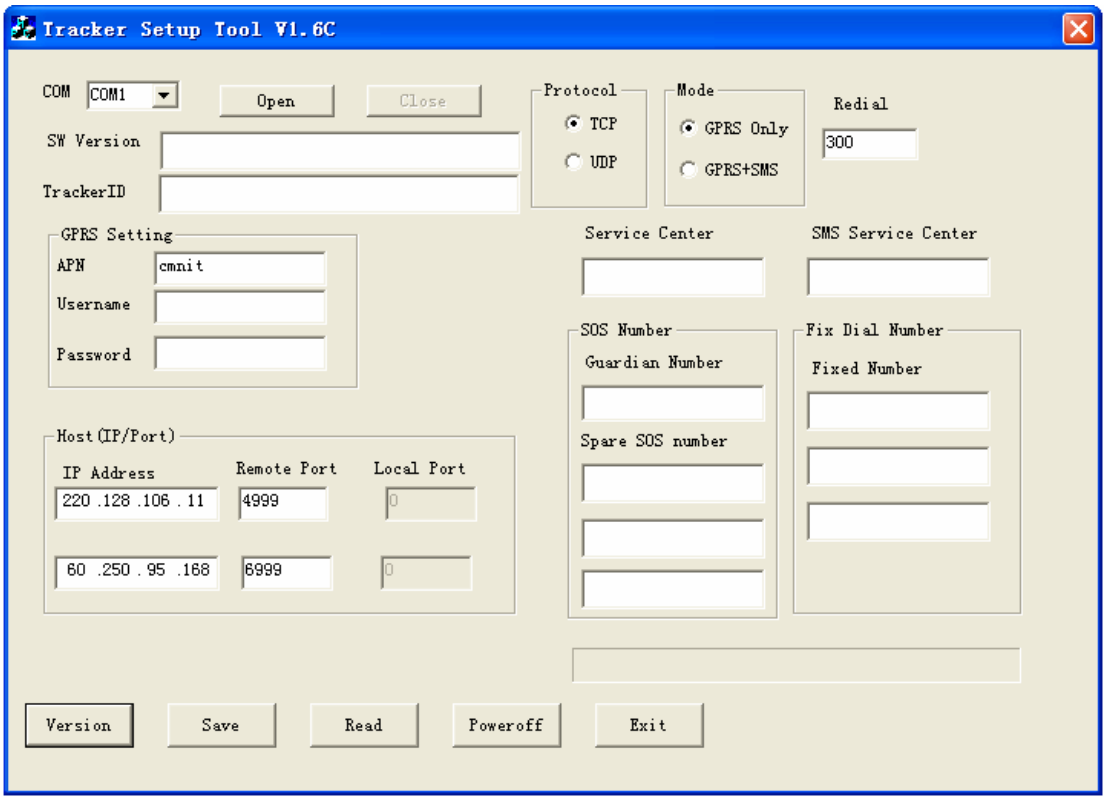
3. Use the special USB **data cable** which for change the parameter and connect the cable with your PC(suggestion: the USB port plug in the back main board of the PC, insure there is current supply when change the parameter)



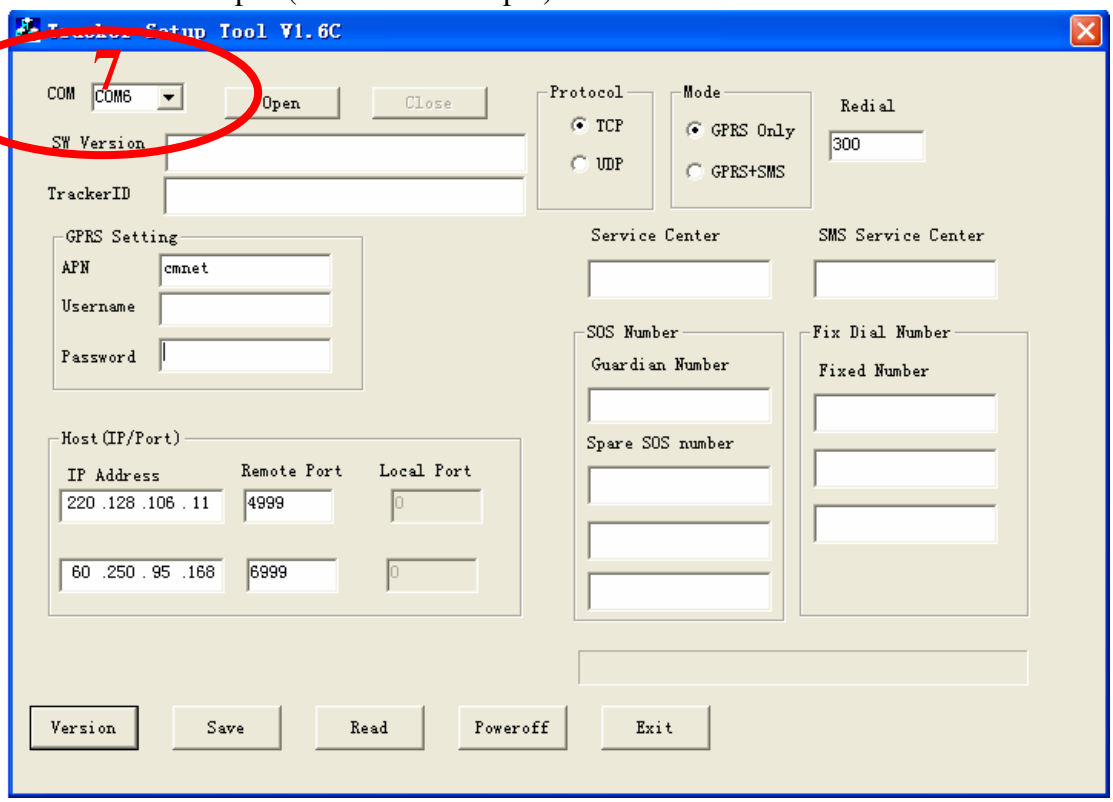
4. Find out what USB port which you are using from the : hardware/ equipment manager/ port



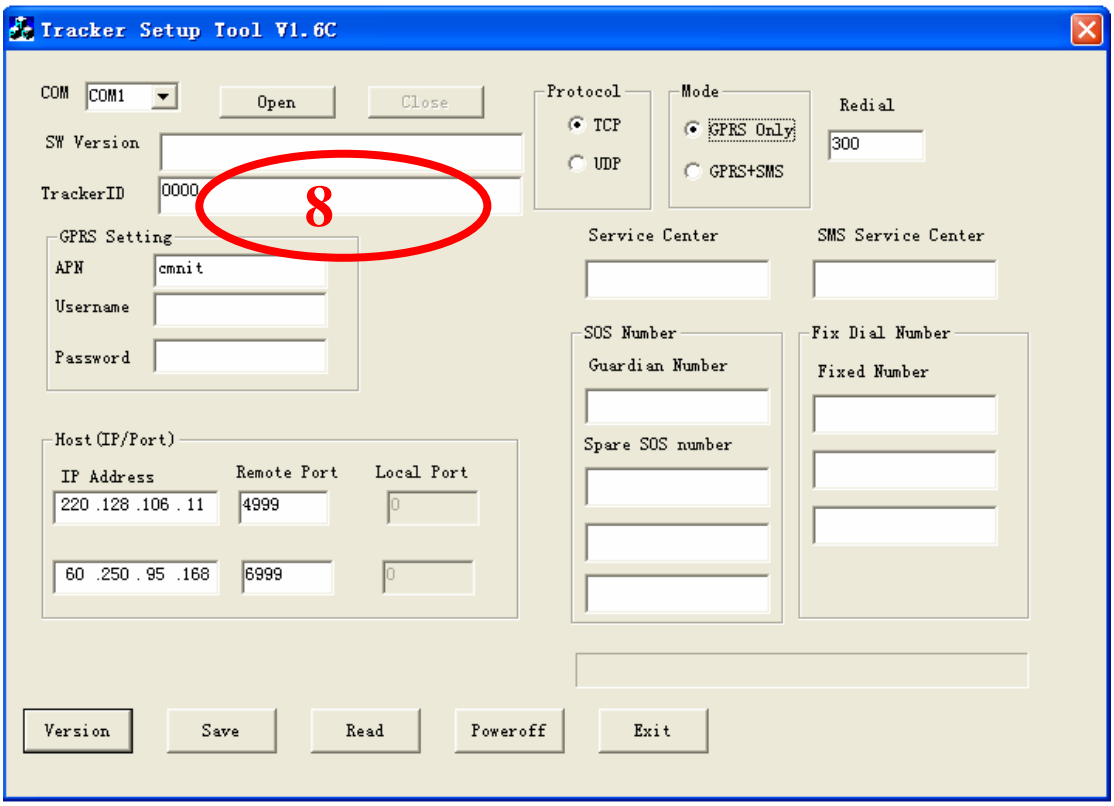
5. Open the “Tracker Setup Tool V1.6C” tool



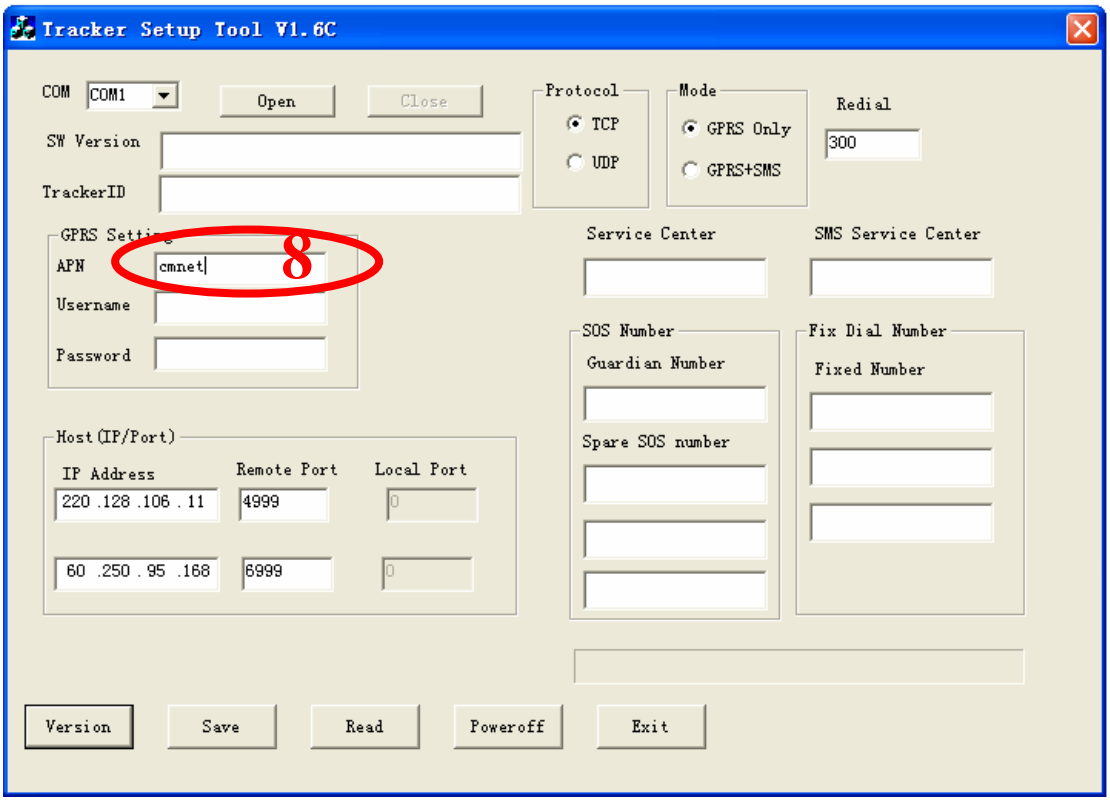
6. Check the versions of the software is correct or not
7. Chose the correct COM port(can find it in step 3)



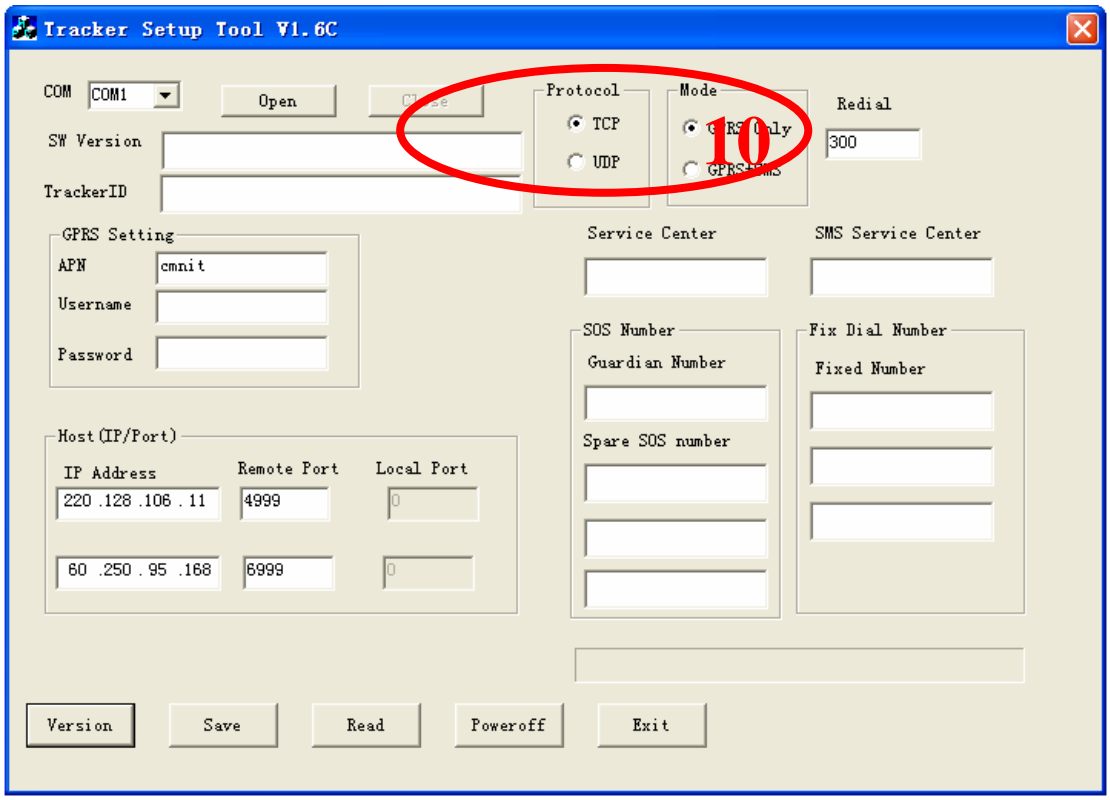
8. In put IMEI number (if you do not know the IMEI you can input any 4 numbers discretionarily)



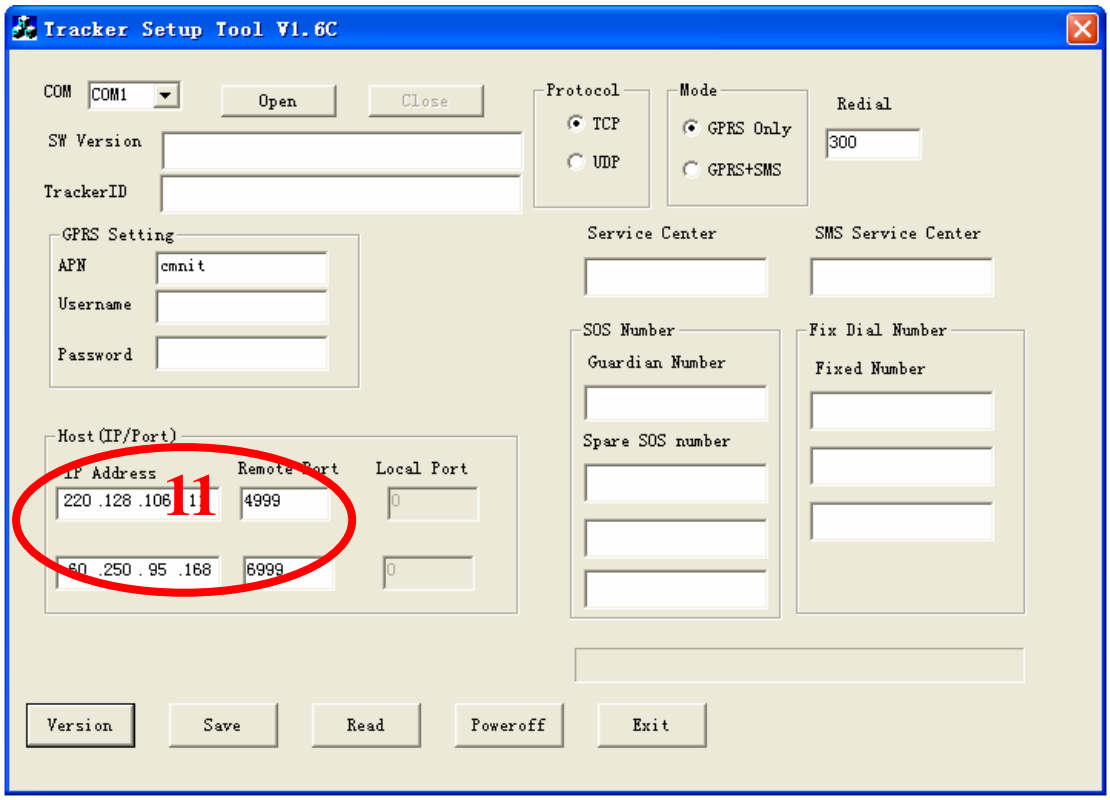
9. In put the APN , different country and net work , the APN is different.the APN in mainland China is “cmnet”



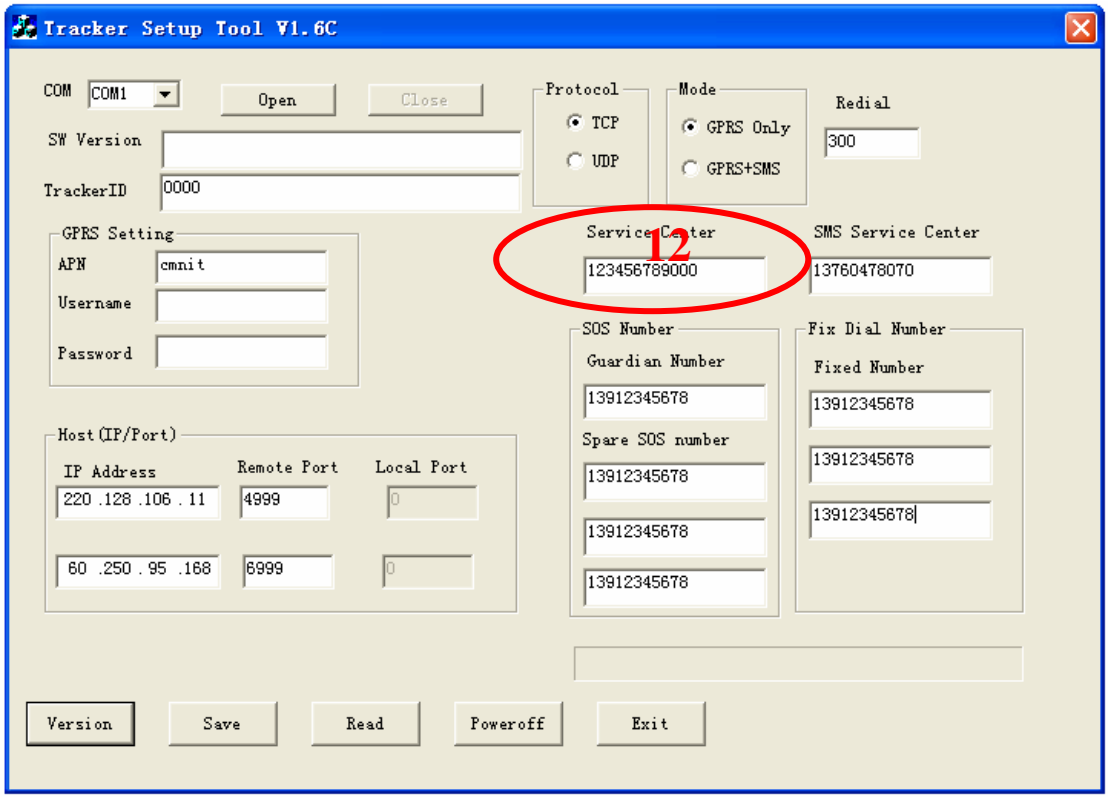
10. The parameter of Protocol\Mode\Redial is defauly value, Change the Mode as GPRS+SMS



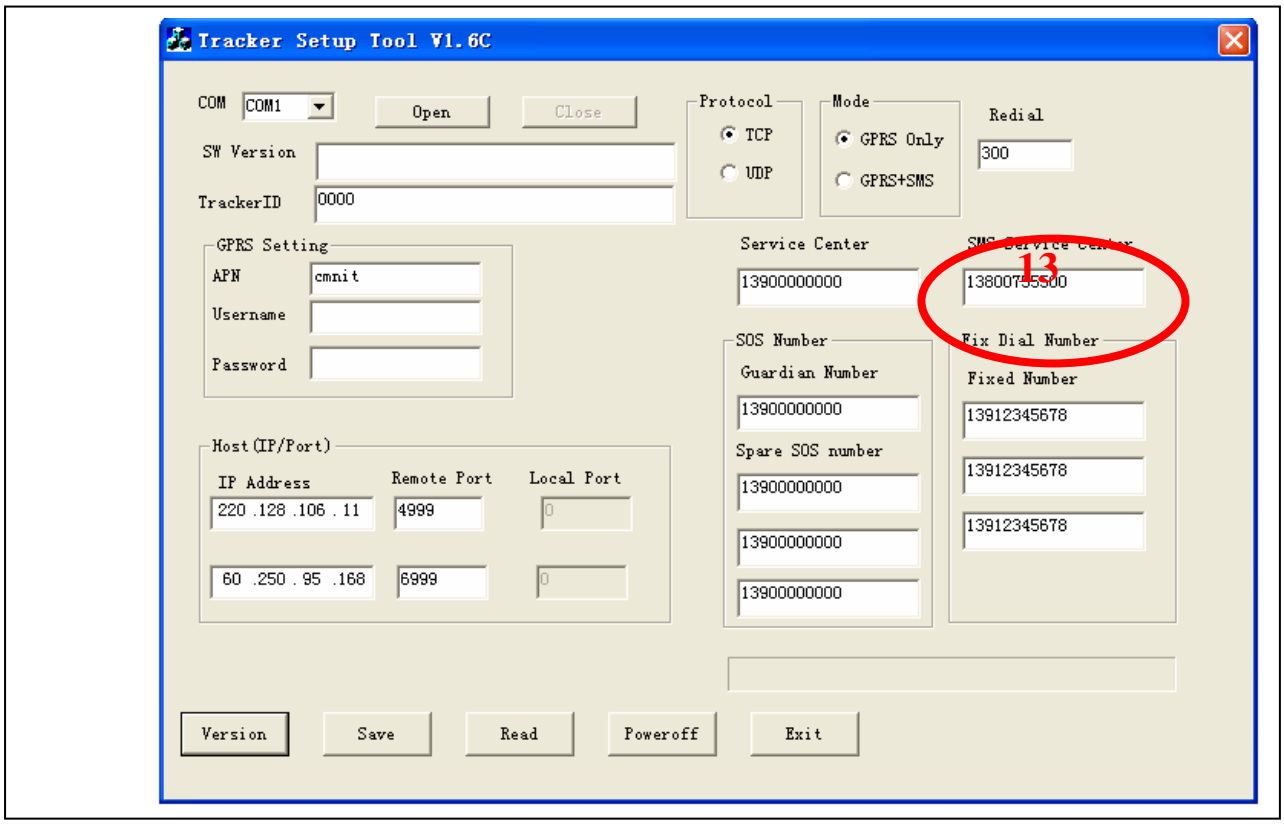
11. Input the IP address, different network, the IP address is different



12. Set the service center number, the service center number is optional section. If disable the GPRS function, the service Center will received the SMS reply from GMT2000. If GPRS function is enable, the service center will not received any SMS reply.

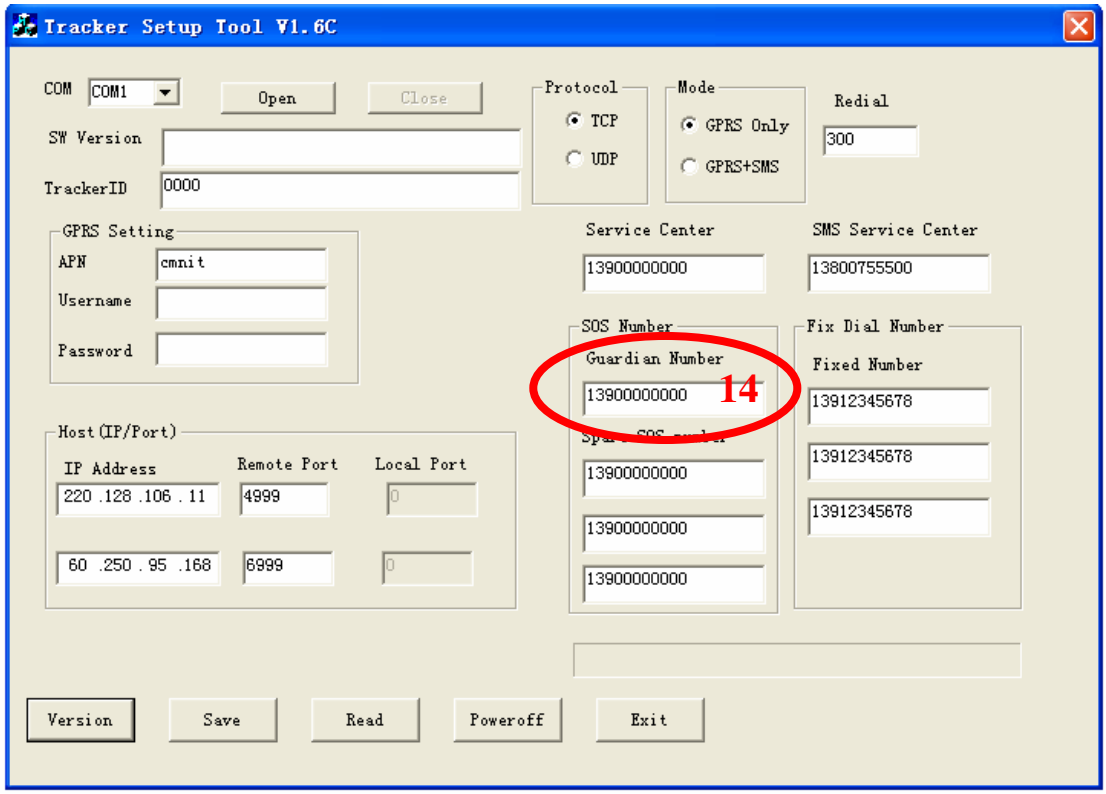


13. Set the SMS service center number , different network carrier, the SMS service center

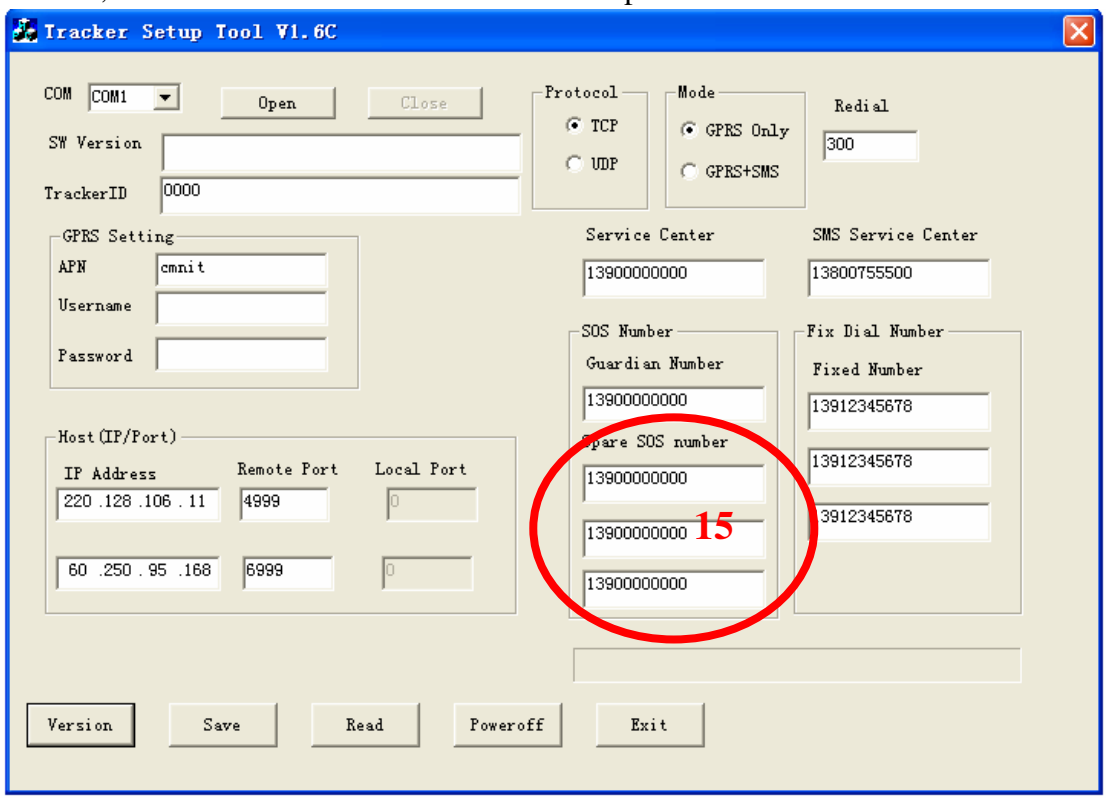


number is different, the SMS service center number of mainland China is “13800755500”

14. Set the guardian Number , the guardian Number is the number that most easy to control by the device user. Only this number can send SMS command to modify the setting of GMT2000.

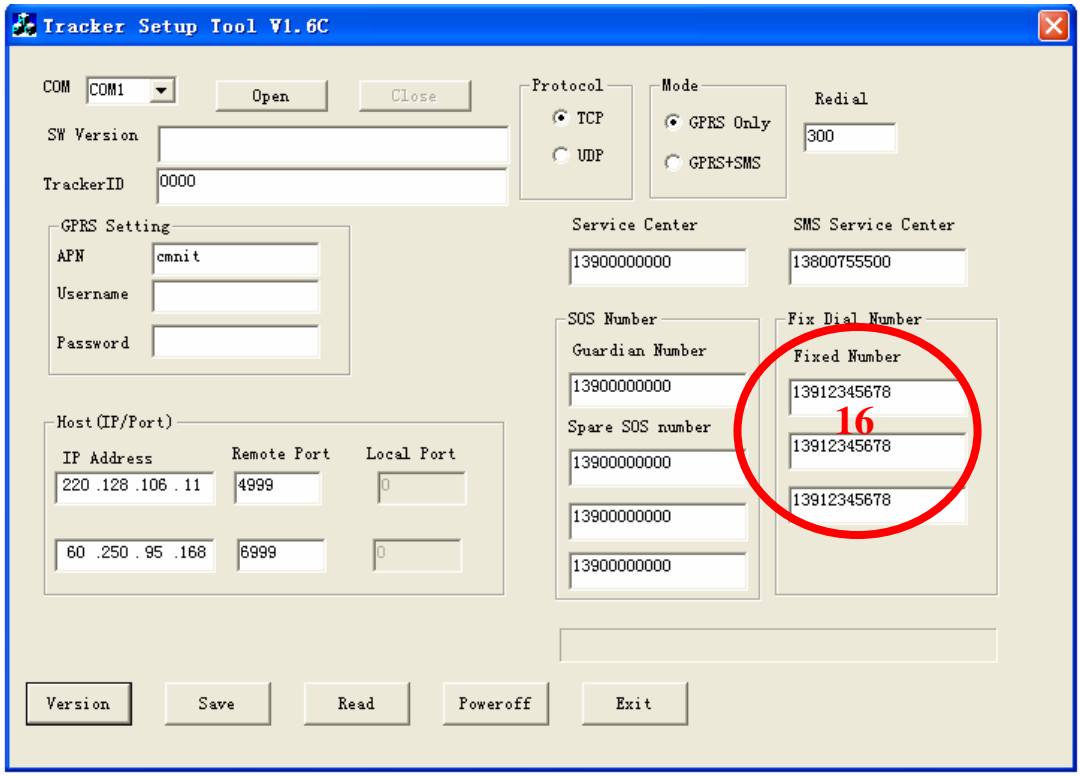


15. Set the SOS number, This base on your requirement. When Press SOS button for 3 seconds, those number will received the SOS help SMS from Device

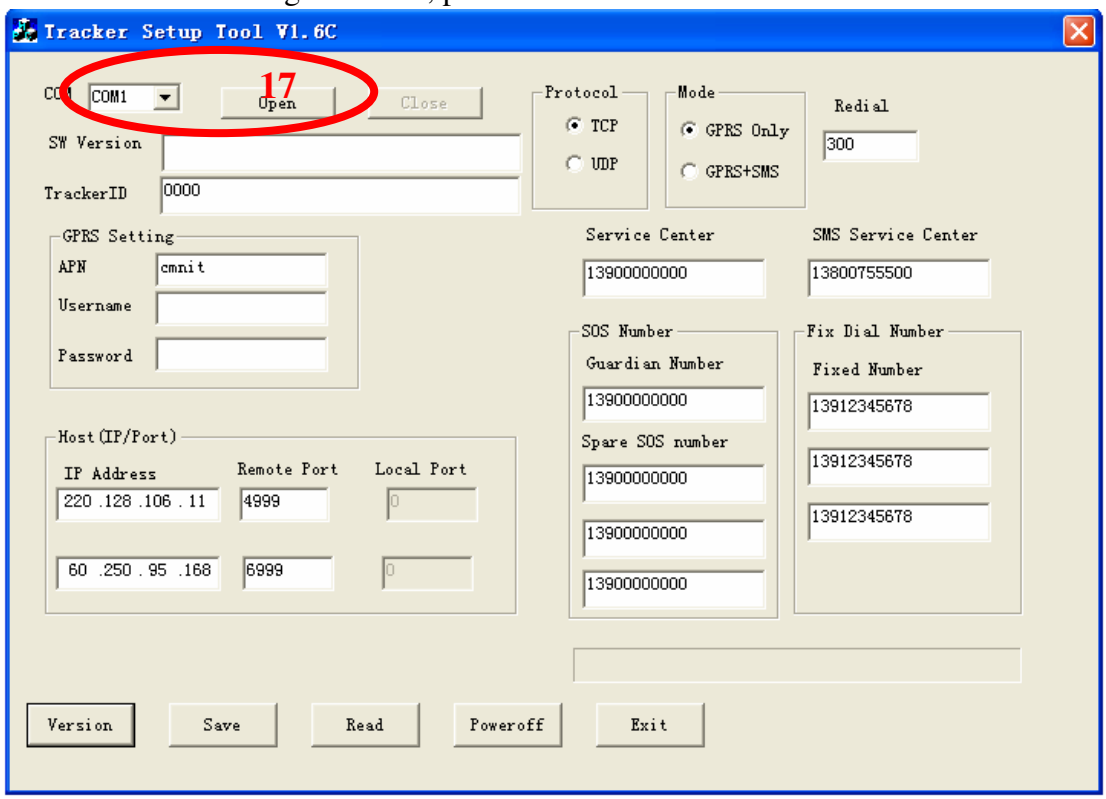


16. Set the fix Dial number, This base on your requirement

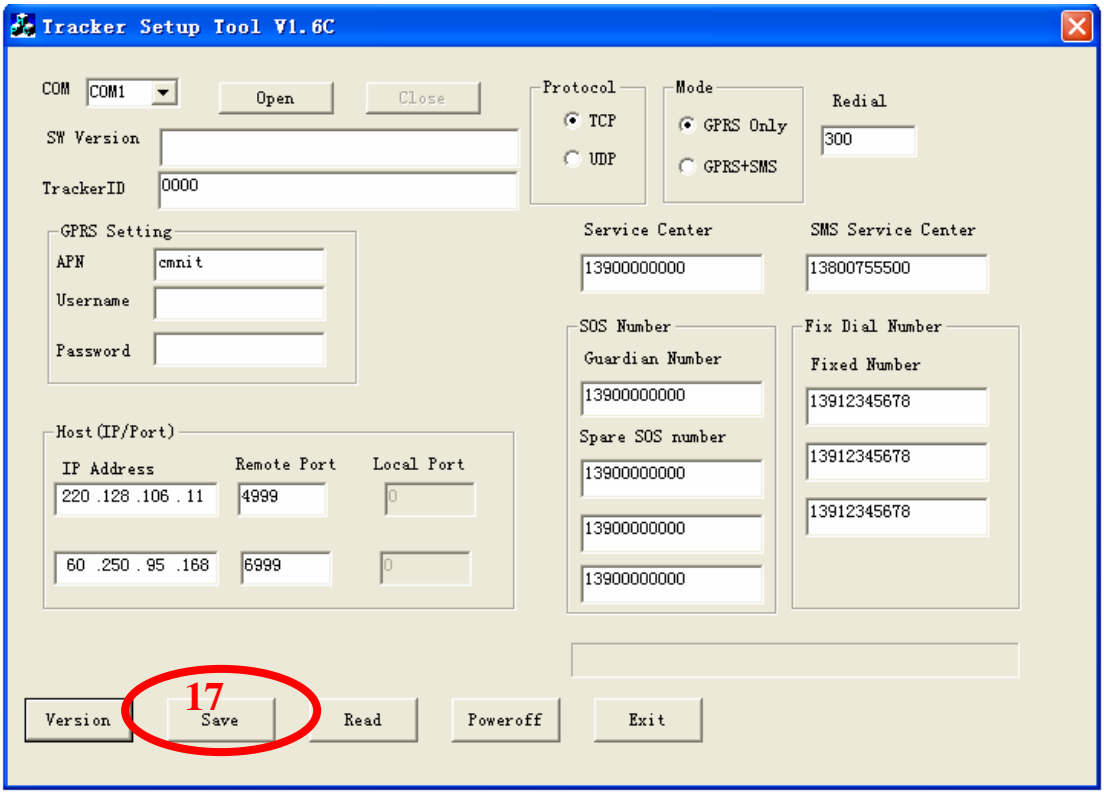
When press the call button (NO.1/NO.2/NO.3) and press the dial button, the preset number will received a call from Device.

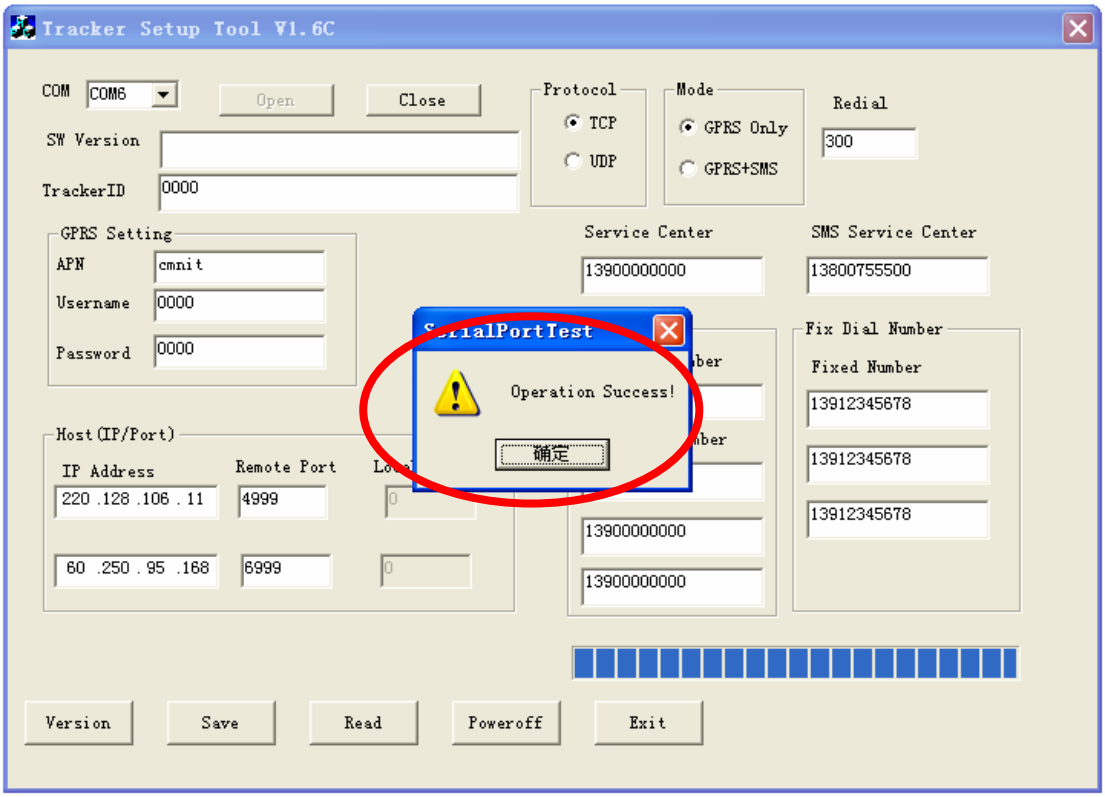


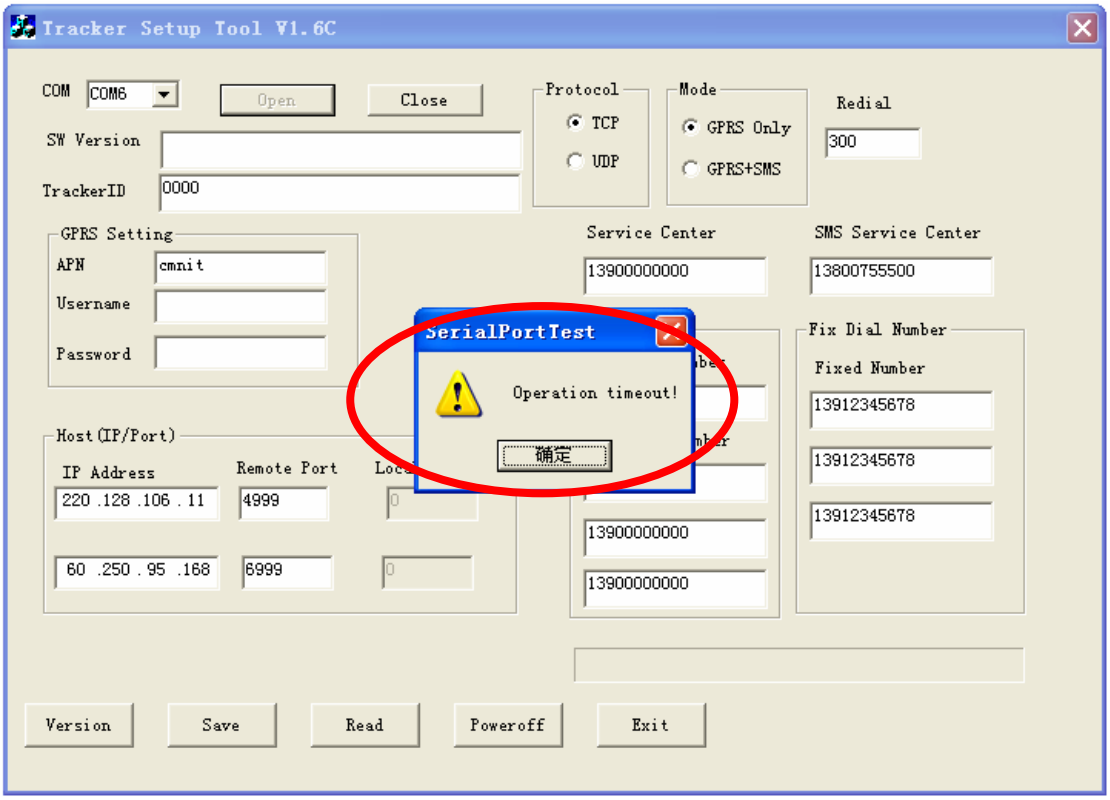
17. When above setting is correct, please click OPEN



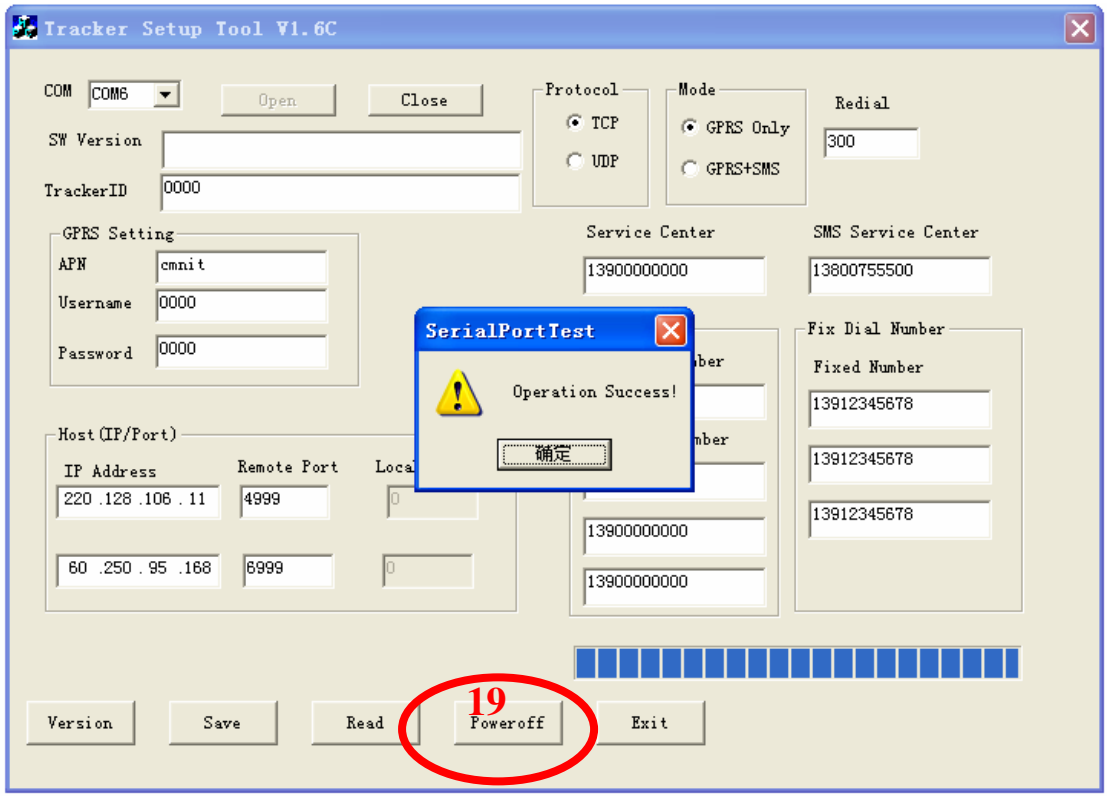
18. Click save to update the data, If update success, the screen with appear “operation success”, otherwise with appear“operation timeout”


Tracker Setup Tool V1.6C
COM
COM1
Open
Close
SW Version
TrackerID
0000
Protocol
TCP
UDP
Mode
GPRS Only
GPRS+SMS
Redial
300
GPRS Setting
APN
cmnit
Username
Password
Service Center
13900000000
SMS Service Center
13800755500
SOS Number
Guardian Number
13900000000
Spare SOS number
13900000000
13900000000
13900000000
Fix Dial Number
Fixed Number
13912345678
13912345678
13912345678
Host(IP/Port)
IP Address
Remote Port
Local Port
220 .128 .106 . 11
4999
0
60 .250 . 95 .168
6999
0
17
Version
Save
Read
Poweroff
Exit


Tracker Setup Tool V1.6C
COM
COM6
Open
Close
SW Version
TrackerID
0000
Protocol
TCP
UDP
Mode
GPRS Only
GPRS+SMS
Redial
300
GPRS Setting
APN
cmnit
Username
0000
Password
0000
Service Center
13900000000
SMS Service Center
13800755500
SerialPortTest
Operation Success!
确定
Fix Dial Number
Fixed Number
13912345678
13912345678
13912345678
13900000000
13900000000
Host(IP/Port)
IP Address
Remote Port
220 .128 .106 . 11
4999
60 .250 . 95 .168
6999
Version
Save
Read
Poweroff
Exit



19. When update success click the “Power off”. When appear “operation success”, the parameter of the device is update successful, then 3lights of the device will be off, pls full out the USB cable this time.



Caution:

1. check if there is SIM card in the device, in this process , the device should be without SIM, if there is SIM in the device pls put it out.
2. before plug in the USB, insure the device is in the power on state, the 3 lights of the device is light
3. must use the USB cable which is special for change the parameter, the Simple USB cable is useless for it
4. Insure the com port you select is correct
5. the other setting did not mention in above is selected information, in the common situation, it is not necessary to set.

9. SMS Command List

	Mobile phone (send to GMT2000)	Mobile phone (receive from GMT2000)
One time report	(CTR,000)	(ONEhhmmss A Lat.,N Long.Espeed course ddmmyy Alarm message) hh=hour, mm=minute, ss=second dd=day, mm=month, yy=year EX:(ONE025857A22 32.0729N11356.0030E000.021091101 00000000)
Continue report	(CMD,ITV,FF,hhmmss) FF： start to continue report EX: CMD,ITV,FF,000030 means **30=** each second to send one message. **000500** = 5 hours to send one message	(ITV hhmmss A Latitude N Longitude E Speed Direction ddmmyy Alarm message) EX:(ITV025857A2232.0729N11356.0030E000.021091101 00000000)
Stop continue report	(CMD,ITV,00,hhmmss) 00： stop continue report Ex.: (CMD,ITV,**00,000000**)	(FNS,ITV,00,000000)
monitor	(CMD,003,number) EX: (CMD,003,1234567989)	GMT2000 will dial to number automatically
Service number setting (Call center)	(CMD,006,006,number,number)	(FNS,006,006,number,number) Twice setting is in order to make sure the number is correct.
SMS center number setting	(CMD,007,007,number,number)	(FNS,007,007,number,number) Twice setting is in order to make sure the number is correct.
Speed dialing number setting	(CMD,012,3,number1,number2,number3) **(CMD,012,3,13511111111,135222222222,13533333333,0)**	(FNS,012,3,number1,number2,number3)
SOS number setting	(CMD,014,3,guardian number1,number 2,number3,0) Ex . **(CMD,014,3,13511111111,135222222222, 13533333333,0)**	(FNS,014,guardian number,SOS1,SOS2 ,SOS3)

Alarm message	None	(ONE 025857 A 22 32.0729 N 113 56.0030 E 000.0 21 091101 00000000)
Geofence alarm	（CMD，CIR，500）	（FNS，CIR，500）
Cancel Geofence	（CMD，CIR， 0）	（FNS，CIR，0）

10. Faults & The solutions

The Chart below shows the possible unusual conditions and methods to solve the problems, you may try solving the problem according to the suggested instructions before consulting the service engineer.

Faults	Solution
Startup Fail	Check the battery and see if it is fully charged or correctly installed.
After Power on, no LED	Check the SIM card and see it is correctly installed.
Can't received the sms report from GMT-2000	Dial to the SIM card number on GMT-2000 and make sure it could connect. Or make sure enough deposit in the SIM card to avoid any in convenience.
GPRS can't upload data of longitude and latitude	Check APN and IP/port setting is Correct.
Hangup Fail	In existence of an authorized number, an unauthorized number dials up the unit. Please initialize the unit and re-set up the authorized numbers.
Monitor Fail	Check if the authorized number is setup or in the coverage of signals.
Location report in digits of zeros.	Don't use it in the place beyond reach of signals. Place the unit outdoors, especially when starting it up.